

*As we celebrate the U.S. Environmental Protection Agency's 35<sup>th</sup> anniversary, we are strengthening our commitment to accelerating the pace of environmental protection while maintaining the nation's economic competitiveness.*

*Collaborative efforts, innovative programs, and information sharing can be effective tools for today and tomorrow. Through our Sector Strategies Program, EPA works hand-in-hand with many sectors to reduce their environmental impacts in cost-effective ways and to share information with the public. By engaging a broad range of stakeholders in the process, we promote a culture of understanding and environmental stewardship.*

*As EPA seeks new and better ways to pursue its mission, the measurement of environmental progress becomes even more important. New policies and programs to provide regulated entities with flexibility to tackle tough problems in innovative ways demand better methods to ensure accountability and demonstrate results.*

*This 2006 Sector Strategies Performance Report compiles the best available information to document performance trends in participating sectors. It reveals strengths and weaknesses both in performance and in available data on environmental results. I invite you to read it carefully and make full use of its contents.*



*I hope that this report prompts a renewed commitment from government, industry, and other stakeholders to gather, share, and use quality performance data. Such a commitment is an essential foundation for greater collaboration, innovation, and accelerated environmental and economic progress.*

*Sincerely,*

A handwritten signature in black ink, which appears to read "S. L. Johnson". The signature is fluid and cursive.

*Stephen L. Johnson*

*Administrator*

**INTRODUCTION** The U.S. Environmental Protection Agency (EPA) invites you to learn about the environmental performance of major U.S. manufacturing and service sectors in this 2<sup>nd</sup> edition of the *Sector Strategies Performance Report*. Eleven sectors are profiled in the report:

- Cement
- Colleges & Universities
- Construction
- Forest Products
- Iron & Steel
- Metal Casting
- Metal Finishing
- Paint & Coatings
- Ports
- Shipbuilding & Ship Repair
- Specialty-Batch Chemicals

These sectors participate in EPA's Sector Strategies Program, which uses collaborative partnerships to promote widespread improvement in environmental performance with reduced administrative burden.<sup>1</sup>

As with the 1<sup>st</sup> edition of the *Performance Report*, issued in 2004, this document has two primary objectives:

- To profile each sector, highlighting economic statistics and trends; and
- To describe, and where possible, to measure environmental progress to date, focusing on performance trends over the past 10 years.

New to this edition are two chapters that tie together information from all of the participating sectors in regard to the following themes:

- *Leadership by Trade Associations* describes how participating trade associations can serve as valuable catalysts in the effort to improve environmental performance among their members.
- *Beneficial Reuse of Materials* describes how participating sectors are turning would be wastes into substitutes for raw materials and/or sources of energy.

The 2006 report also introduces the use of toxicity-weighted data to supplement basic information on emission trends. The toxicity-weighted data provide insights about the greatest opportunities for each sector to make progress in reducing the toxicity of its releases. Detailed information on toxicity weighting, as well as all of the other data used in the report, can be found in the *Introduction to Sector Profiles* chapter.



**THE SECTOR STRATEGIES PROGRAM** The Sector Strategies Program develops performance improvement strategies for major manufacturing and service sectors of the U.S. economy. In 2005, there were 12 participating sectors represented by more than 20 national associations.

These sectors are significant for their contributions to the nation's economy as well as their environmental and energy footprints. Together, participating sectors represent a combined \$2.1 trillion (19%) contribution to the U.S. gross domestic product, with more than 780,000 facilities and locations across the country.<sup>2</sup> A snapshot of their environmental footprint can be found in the *Sectors At-a-Glance* box below.<sup>3</sup>

## Sectors At-A-Glance

The manufacturing sectors profiled in this report represent the following contributions to U.S. manufacturing totals:

- 32% of TRI releases
- 18% of hazardous waste generated
- 33% of criteria air pollutant emissions from point sources
- 20% of energy consumption

Sources: U.S. EPA, U.S. DOE.

Through the Sector Strategies Program, EPA maintains collaborative working relationships among stakeholders in business, government, and the public to address challenging environmental problems. Program staff members are experts on their sectors, providing policy analysis and facilitating dialogues to identify cost-effective actions that will reduce environmental impacts and ease regulatory burden in each sector.

Each individual sector strategy seeks to reduce major performance barriers and prompt environmental stewardship on a broad scale. These strategies may include a range of actions, from targeted regulatory changes to create environmental standards that are more performance (that is, results) oriented to promotion of environmental management systems or other recognized stewardship tools.

Participating trade associations have made commitments to proactively pursue environmental stewardship, with help from collaborative programs like Sector Strategies. This commitment is reflected in the total expenditure of more than \$5 billion annually on environmental protection by the manufacturing sectors profiled in the report.<sup>4</sup>

Participation in the Sector Strategies Program carries with it a commitment to measure performance results through quantitative metrics. This report, and its 2004 predecessor, track sector-wide performance trends using the best available data, including those collected by associations.

For more information on the Sector Strategies Program, please visit [www.epa.gov/sectors](http://www.epa.gov/sectors). The *2004 Sector Strategies Performance Report* is available online at [www.epa.gov/sectors/performance2004.html](http://www.epa.gov/sectors/performance2004.html).

## National Associations Representing Participating Sectors

### Agribusiness

American Meat Institute

National Food Processors Association

### Cement

Portland Cement Association

Colleges & Universities

American Council on Education

APPA: Association of Higher Education Facilities Officers

Campus Consortium for Environmental Excellence

Campus Safety, Health and Environmental Management Association

Howard Hughes Medical Institute

National Association of College and University Business Officers

### Construction

Associated General Contractors of America

### Forest Products

American Forest & Paper Association

### Iron & Steel

American Iron & Steel Institute

Steel Manufacturers Association

### Metal Casting

American Foundry Society

North American Die Casting Association

### Metal Finishing

American Electroplaters and Surface Finishers Society

Metal Finishing Suppliers' Association

National Association of Metal Finishers

Surface Finishing Industry Council

### Paint & Coatings

National Paint & Coatings Association

### Ports

American Association of Port Authorities

Shipbuilding & Ship Repair

American Shipbuilding Association

Shipbuilders Council of America

Specialty-Batch Chemicals

Synthetic Organic Chemical Manufacturers Association

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